

Claims

- 1 1. An occupant safety restraint system comprising:
2 a first occupant protection system having at least one seat belt
3 movable about the occupant:
4 a second occupant protection system comprising a lower leg
5 protection system including a deployable knee bolster to protect at
6 least a portion of the lower extremities of the occupant and
7 first means for deactivating the second occupant protection
8 system based upon the operational state of the first occupant
9 protection system.
- 1 2. The system as defined in Claim 3 further including sensor
2 means for generating a deactivation signal upon the occurrence of
3 certain conditions.
- 1 3. The system as defined in Claim 2 wherein the sensor means
2 includes at least one of a first sensor configured to generate the
3 deactivation signal on the latching of a seat belt tongue within a
4 corresponding buckle and a proximity sensor configured to generate
5 the deactivation signal when a portion of a lower leg of the occupant is
6 sufficiently close to the knee bolster.
- 1 4. The system as defined in Claim 1 wherein the first occupant
2 protection system comprises a multi-point seat belt system.
- 1 5. The system as defined in Claim 4 wherein the multi-seat belt
2 system comprises a tongue latchable within a buckle.

1 6. The system as defined in Claim 5 further including sensor
2 means for generating a deactivation signal indicating one of a) the
3 tongue is latched in the buckle and b) the tongue is not latched within
4 the buckle.

1 7. The system as defined in Claim 6 further including deactivation
2 signal means responsive to the deactivation signal for deactivating the
3 knee bolster.

1 8. The system as defined in Claim 4 wherein the first means
2 includes a lower leg proximity sensor for generating the deactivation
3 signal.

1 9. The system as defined in Claim 1 including a weight sensor for
2 determining the presence of a seated occupant.